

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q80674

Kiyoaki EGAWA

Appln. No.: 10/809,364

Group Art Unit: 3652

Confirmation No.: 7561

Examiner: Micheal S. LOWE

Filed: March 26, 2004

For: STORAGE MEDIUM TRANSPORTING APPARATUS WITH AN IMPROVED  
TRANSMISSION MECHANISM FOR DRIVING A PICKER

**REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits  
this Reply Brief in response to the Examiner's Answer dated July 22, 2009. Entry of this Reply  
Brief is respectfully requested.

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**STATUS OF CLAIMS**

Claims 1-5 and 8-17 are all the claims pending in the application. Claims 1-5 and 8-17 stand finally rejected and are the subject of this Appeal. Claims 6-7 are canceled.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

(1) Claims 1-3 and 11-17 stand rejected under 35 U.S.C. § 103(a) as obvious over Takeshi (2002-025167) in view of Yosheida (US 4,655,662).

(2) Claims 4, 5, and 8-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeshi (2002-025167) in view of Yosheida (US 4,655,662) and Ono (JP 03-147564).

## **ARGUMENT**

### **Claim Rejections - 35 U.S.C. § 103(a)**

Claims 1-3 and 11-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeshi (JP 2002-025167) in view of Yoshieda (US 4,655,662).

Claim 1 recites, *inter alia*, wherein said carriage has cams which make said gripper open or close in response to the movement of said picker.

In response to the Appellant's arguments submitted with the Appeal Brief filed April 13, 2009, the Examiner concedes that Takeshi fails to disclose how the "gripping or picking happens," but contends Yoshieda discloses this feature. Specifically, the Examiner provides:

Yoshieda teaches a number of cams (generally 38 (36), 43, etc) that move the picker (generally 15) and spring loaded grippers (generally 17) to close and grab items at a given location as a result of the cam movement. This is clearly shown in figures 1, 3, and 5 for example.

*Examiner's Answer*, pp. 8-9.

Consequently, it is apparent from the Examiner's remarks that Takeshi fails to disclose a carriage having cams performing the open and close function. Further, Takeshi fails to disclose any single cam performing this function. Appellant submits that because Yoshieda also fails to disclose cams on a carriage performing this function, even if combined as suggested, the applied combination fails to disclose a carriage having cams which make said gripper open or close in response to movement of a picker.

### **Carriage and Picker Mechanisms**

As an initial matter, claim 1 requires that the carriage of claim 1 move relative to a base between a holder and a storage device. The Examiner identifies Takeshi's loading/unloading

part 30 as corresponding to the recited carriage. *See* Examiner's Answer, p. 4. Further, the Examiner identifies Takeshi's holding part 31 as corresponding to the recited picker. *See id.*

Regarding the recited first driving force and second driving force, the Examiner relies on guide screw 52 and rotating shaft 51A as corresponding to these features.

Turning to Yoshieda's disclosure, the Examiner attempts to construe gripper mechanism 10 as a carriage. Functionally, this correlation does not appear unreasonable. Lastly, the rod 22 and linkage 20 are the connecting portions between the grippers 17 and the gripper mechanism 10, thus, they must be somehow construed as a picker.

On the other hand, if these portions 20, 22 are not construed as a picker, Appellant submit one of ordinary skill would not combine the references as suggested. Rather, Yoshieda would only disclose a carriage and a gripper (no picker present). Moreover, Yoshieda would only disclose a gripper which moves based on the driving force of a carriage and induced by components external to the carriage (see cam discussion below).

#### **Yoshieda Fails to Disclose the Recited Cams**

As set forth above, Takeshi is silent with regard to how the alleged grippers open or close in response to the movement of the alleged picker. Thus, Yoshieda is relied on to cure this deficiency.

However, Yoshieda is deficient in several regards. First, the gripper mechanism 10, which allegedly corresponds to the recited carriage, only has a single cam. Notably, claim 1 requires that the carriage have cams. Specifically, Yoshieda's gripper mechanism only has a single cam follower 36. *See* col. 3, lines 26-27; FIG. 1. This cam follower 36 engages a pair of

cams 37, 38 which are external to the gripper mechanism 10. *See* col. 3, lines 27-28; FIG. 7.

Accordingly, Yoshieda's gripper mechanism 10 only has a single cam.

Second, Yoshieda's cams, 36, 37 and 38, fail to make the gripper 17 open in response to a movement of the linkage 20 and rod 22 (picker). Rather, it is the movement of the linkage 20 which moves by direct attachment to the rod 22 that causes the grippers 17 to open and close. *See* col. 2, line 63 through col. 3, line 10. Consequently, Yoshieda fails to disclose cams on the gripper mechanism 10 which cause the grippers 17 to open and close in response to a movement of the linkage 20 and rod 22. Thus, Appellants submit Yoshieda fails to disclose the feature "wherein said carriage has cams which make said gripper open or close in response to the movement of said picker," of which Takeshi is silent.

In conclusion, Appellant submits the propose combination fails to disclose all the features recited in claim 1 because: (1) the Takeshi and Yoshieda combination fails to disclose a carriage having a plurality of cams; and (2) the Takeshi and Yoshieda combination fails to disclose cams which make said gripper open or close in response to the movement of said picker.

Thus, Appellant submits claim 1 is allowable for at least this reason. Additionally, because claims 16 and 17 recite features similar to the features of claim 1 discussed above, Appellant submits these claims are allowable for the same reasons set forth above. Finally, Appellant submits claims 2-3 and 11-15 are allowable, at least by virtue of their dependency.

**Claim Rejections - 35 U.S.C. § 103(a)**

The Examiner rejected claims 4, 5 and 8-10 under § 103(a) as being unpatentable over Takeshi in view of Yoshieda and Ono (JP 03-147564). Appellant traverses this rejection as follows.

Because Ono fails to compensate for the above noted deficiencies of Takeshi and Yoshieda as applied to claim, Appellant submits claims 4, 5 and 8-10 are allowable, at least by virtue of their dependencies.

**CONCLUSION**

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,

/David P. Emery/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

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David P. Emery  
Registration No. 55,154

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